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REMARKS/ARGUMENTS

The present application has been reviewed in light of the Final Office Action dated

March 9, 2009. Claims 1-72 are pending in this application and claims 12-69 have been

previously withdrawn. Applicants respectfully request reconsideration of these rejections and

reexamination of the above-identified application in view of the remarks below.

Applicants respectfully reserve the right to file at least one divisional application to non-

elected claims 12-69.

Claims 1-9 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S.

Patent No. 6,716,233 to Whitman (hereinafter "Whitman"). Applicants respectfully submit that

claim 1 is allowable over Whitman.

MPEP §2131 states that "[a] claim is anticipated only if each and every element as set

forth in the claim is found, either expressly or inherently described, in a single prior art

reference." (Citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2

USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Applicants submit that Whitman does not anticipate each and every element of

independent claim 1. Independent claim 1 presently recites, in part, at least one micro-

electromechanical system (MEMS) device operatively connected to the surgical instrument for at

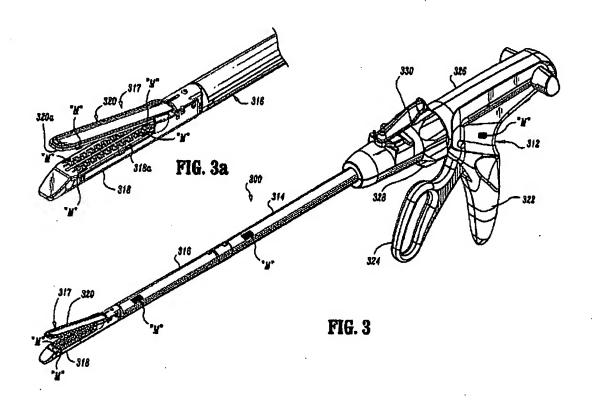
least one of sensing a condition, measuring a parameter and controlling the condition and/or

parameter adjacent the end effector.

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As seen in at least FIGS. 1-4 of the present disclosure (only FIGS. 3, 3A being reproduced below by way of example), the surgical stapling instrument includes several MEMS "M" that are disposed on the surgical instrument.



Whitman does not disclose "...at least one micro-electromechanical system (MEMS) device operatively connected to the surgical instrument for at least one of sensing a condition," as recited in claim 1.

In particular, Whitman is directed to a medical tool comprising an electromechanical driver and a surgical instrument attachment for use in invasive surgery, including a handle coupled to a flexible sheath which is in turn coupled to a surgical attachment (See Whitman,

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Abstract). The stapling attachment comprises an anvil portion 202, and a staple, blade, sensor, and reservoir (SBSR) portion 204, which includes a pair of turning drive shafts 206a, 206b, where the SBSR includes pulse oximeter and tissue proximity sensors 150, 152 (column 9, lines 41-57). In other words, Whitman discloses simple, one-dimensional sensors, but does not disclose at least one MEMS type sensor.

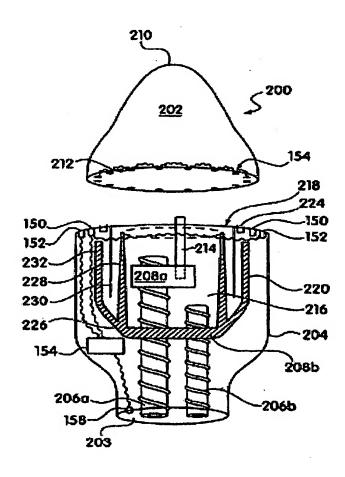


FIG. 3

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Additionally, with regard to FIG. 3, Whitman states that the pulse oximeter comprises a

series of light emitting elements 154 on the anvil and light sensors 150 (column 10, lines 15-20).

Thus, Whitman only discloses simple light sensors, having one-dimensional aspects and/or

features.

In contrast, in the present disclosure, Claim 1 specifically requires a micro-

electromechanical system device, or MEMS device. The MEMS device could be a pressure

sensor, a strain sensor, a displacement sensor, an optical sensor, a biosensor, a temperature

sensor, a torque sensor, an accelerometer, a flow sensor, an electrical sensor and/or a magnetic

sensor. In other words, a MEMS sensor is a more advanced "sensor" in that it may also detect

and monitor a plurality of different parameters. Thus, the MEMS device disclosed in the present

disclosure is different from the type of sensors disclosed in Whitman. In the present disclosure,

at least one MEMS sensor is operatively connected to the end effector and includes an electronic

system integrated therein, such electronic integrated system is not provided in Whitman.

Support for such features can be found at least at pages 1 through 3 of the specification for the

present application.

In general, MEMS devices sense, control and/or actuate on the micro scale and are

complex systems which include one or more electrical systems and/or one or more micro-

mechanical systems. Although a MEMS device can incorporate a sensor, they are not simply

sensors. MEMS-based sensor products provide an interface that can process and/or control the

surrounding environment, unlike a conventional sensor such as the light sensor disclosed in

Whitman. Thus, the MEMS devices of the present disclosure are multi-functional, multi-

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dimensional, multi-operational devices having a plurality of capabilities related to a plurality of

parameters. In contrast, the sensor of Whitman is a simple sensor (e.g., only capable of sensing

the presence or lack of light) incapable of complex functionality.

Applicants therefore respectfully submit that, in view of the arguments presented above,

that claim 1 is allowable over Whitman because Whitman fails to anticipate each and every

feature of claim 1.

Claims 2-9 and 11 depend, either directly or indirectly, from claim 1. For at least the

reasons presented above regarding the patentability of claim 1, Applicants respectfully submit

that the subject matter of claims 2-9 and 11 as a whole are patentable over Whitman.

Claim 10 was rejected under 35 U.S.C 103(a) as being unpatentable over Whitman, as

applied to claim 9, in view of U.S. Application No. 2004/0267310 to Racenet et al. (hereinafter

"Racenet"). Applicants submit that claim 10, is allowable over the applied combination of

Whitman and Racenet.

Claim 10 depends from claim 1 and contains all of the features thereof. For at least the

reasons presented above regarding the patentability of claim 1, it is respectfully submitted that

the subject matter of claim 10 as a whole is also patentable over Whitman in view of Racenet.

The Examiner relies on Racenet for the disclosure of either a linear or annular surgical

stapler. However, even assuming the teachings of Racenet proffered by the Examiner, Applicant

submits that Racenet would fail to cure any deficiencies of Whitman as it relates to underlying

independent claim 1 because Racenet fails to teach or suggest "...at least one micro-

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electromechanical system (MEMS) device operatively connected to the surgical instrument," as

recited in claim 1. In view of the foregoing, Applicant respectfully submits that claim 10 is also

allowable over Whitman in view of Racenet under 35 U.S.C. §103(a).

Accordingly, it is respectfully submitted that Applicants' remarks overcome the

rejections of the present Office Action with respect to claims 1-11 and put said claims in

condition for allowance. Applicants request reconsideration and reexamination of the

application in view of the remarks above.

In light of these remarks, favorable consideration and allowance of all outstanding claims

are earnestly solicited. Should there be any questions after the Examiner's review of this paper;

the Examiner is invited to contact the undersigned at either of the numbers indicated below.

Respectfully submitted,

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